

Listing of Claims:

1 **Claim 1 (currently amended):** An information providing
2 apparatus for acquiring contents data representing a high
3 quality still image from a service providing apparatus capable
4 of storing the contents data and of transmitting the contents
5 data in response to a request from a remote user terminal, and
6 for providing the contents data to the remote user terminal,
7 said information providing comprising:
8 reproducing means for reproducing the contents data;
9 picture data relaying means for relaying still picture
10 data obtained from the contents data reproduced by
11 the reproducing means;
12 moving picture coding means for producing compressed
13 moving picture data ~~using a moving picture coding~~
14 ~~format and~~ having a high image quality by
15 transforming from the still picture data coded using
16 a still picture coding format into said compressed
17 moving picture data coded using a moving picture
18 coding format, said still picture data being and
19 obtained from said picture data relaying means,
20 wherein said producing utilizes being performed by
21 ~~way of~~ a stepwise image quality complementary type
22 coding system for complementing an image quality in
23 a stepwise manner, and wherein
24 said moving picture coding means is also for transmitting
25 the compressed moving picture data to the user
26 terminal to display a still display picture using
27 said moving picture coding format; and
28 control means for determining an area of the still
29 picture data coded into the compressed moving
30 picture data in response to a user selection of a

31 portion of the still display picture made from the
32 remote user terminal, and for notifying the selected
33 area to the moving picture coding means.

1 **Claim 2 (previously presented):** An information providing
2 apparatus as claimed in claim 1, wherein
3 said control means is capable of producing a control
4 signal used to change the reproducing state of the
5 reproducing means by receiving a manipulation of the
6 user terminal, and is capable of transmitting the
7 control signal to the reproducing means; and wherein
8 the moving picture coding means produces compressed
9 moving picture data from said still picture data,
10 the content of which is sequentially changed by
11 changing a setting condition of a coding process
12 operation.

1 **Claim 3 (previously presented):** An information providing
2 apparatus as claimed in claim 1, wherein the moving picture
3 coding means also produces audio data having a designated data
4 format from audio data contained in the contents data, and
5 also produces multiplexed AV data by multiplexing the
6 compressed moving data with the audio data, and transmits the
7 multiplexed AV data to the user terminal.

1 **Claim 4 (currently amended):** An information providing
2 apparatus for providing data to a remotely located user
3 terminal in response to a request, comprising:
4 storing means for storing contents data including still
5 picture data;
6 reproducing means for reproducing the contents data;

7 picture data relaying means for relaying the still
8 picture data originated from the contents data
9 reproduced by the reproducing means;
10 moving picture coding means for producing compressed
11 moving picture data ~~coded using a moving picture~~
12 ~~coding format and~~ having a high image quality ~~from~~
13 ~~the~~ by transforming the still picture image data
14 coded using a still picture coding format into said
15 compressed moving picture data coded using a moving
16 picture coding format, wherein said producing
17 utilizes and by way of a stepwise image quality
18 complementary type coding system for complementing
19 an image quality in a stepwise manner, and wherein
20 said moving picture coding means is also for transmitting
21 the compressed moving picture data to the remotely
22 located user terminal for displaying a still display
23 image using said moving picture coding format; and
24 control means for determining an area of still picture
25 data coded into the compressed moving picture data
26 in response to a user selection of a portion of the
27 still display image made from the remote user
28 terminal, and for notifying the selected area to the
29 moving picture coding means.

1 **Claim 5 (previously presented):** An information providing
2 apparatus as claimed in claim 4, wherein
3 said control means is also for producing a control signal
4 used to change the reproducing state of the
5 reproducing means by receiving a manipulation of the
6 user terminal, and is further for transmitting the
7 control signal to the reproducing means; and wherein
8 the moving picture coding means produces compressed
9 moving picture data from the still picture data, the

10 content of which is sequentially changed by changing
11 a setting condition of coding process operation.

1 **Claim 6 (previously presented):** An information providing
2 apparatus as claimed in claim 4, wherein the moving picture
3 coding means also produces audio data having a designated data
4 format from audio data contained in the contents data, and
5 also produces multiplexed AV data by multiplexing the
6 compressed moving picture data with the audio data, and also
7 transmits the multiplexed AV data to the user terminal.

1 **Claim 7 (currently amended):** An information providing
2 system for acquiring content data from a service providing
3 system and for providing a communication service to a remotely
4 located mobile terminal, wherein the content data represents a
5 high quality still image coded using a still picture coding
6 format, said information providing system comprising:

7 moving picture coding means for producing compressed
8 moving picture data ~~coded~~ by transforming said still
9 coding picture format of the content data into said
10 compressed moving picture data coded using a moving
11 picture coding format ~~from the content data and~~
12 using a stepwise image quality complementary coding
13 system; and

14 transmitting means for transmitting the compressed moving
15 picture data to the mobile terminal, wherein
16 the mobile terminal displays a still display image
17 representing the high quality still image from the
18 compressed moving picture data using said moving
19 picture coding format, such that image processing of
20 the content data is primarily conducted by the
21 information providing system to thereby reduce a

22 processing load and/or a memory requirement on the
23 mobile terminal.

1 **Claim 8 (previously presented):** The system of claim 7,
2 wherein the mobile terminal displays the display image in
3 progressively more detail over some period of time.

1 **Claim 9 (previously presented):** The system of claim 7,
2 wherein the mobile terminal is a mobile terminal capable of
3 displaying compressed moving picture images.

1 **Claim 10 (previously presented):** The system of claim 9,
2 wherein the mobile terminal is a PDA or a portable telephone.

1 **Claim 11 (previously presented):** The system of claim 7,
2 wherein the mobile terminal is a PDA or a portable telephone.

1 **Claim 12 (previously presented):** The system of claim 7,
2 further comprising control means for determining an area of a
3 portion of the display image, wherein the portion is chosen by
4 a user manipulation at the mobile terminal, and wherein the
5 control means provides the determined area to the moving
6 picture coding means.

1 **Claim 13 (currently amended):** An information providing
2 system for acquiring content data from a service providing
3 system and for providing a communication service to a remotely
4 located mobile terminal capable of displaying compressed
5 moving picture data and connected to a communication network,
6 wherein the content data represents a high quality still image
7 coded using a still picture coding format, said information
8 providing system comprising:

9 moving picture coding means for producing compressed
10 moving picture data coded using a moving picture
11 coding format ~~from~~ by transforming the content data
12 coded using the still picture coding format into the
13 moving picture data coded using a moving picture
14 coding format, and using a stepwise image quality
15 complementary coding system; and
16 transmitting means for transmitting the compressed moving
17 picture data to the mobile terminal via the
18 communication network such that image processing is
19 conducted at the information providing system to
20 thereby reduce a processing load and/or a memory
21 requirement on the mobile terminal, and wherein
22 the mobile terminal displays a still display image
23 representing the high quality still image from the
24 compressed moving picture data using said moving
25 picture coding format.

1 **Claim 14 (previously presented):** The system of claim 13,
2 wherein the mobile terminal is a PDA or a portable telephone.

1 **Claim 15 (previously presented):** The system of claim 13,
2 wherein the mobile terminal displays the still display image
3 in progressively more detail over some period of time.

1 **Claim 16 (previously presented):** The system of claim 13,
2 further including control means for determining an area of a
3 portion of the display image, wherein the portion is chosen by
4 a user manipulation at the mobile terminal, and wherein the
5 control means provides the determined area to the moving
6 picture coding means, which then produces new compressed
7 moving picture data from the content data using the stepwise
8 image quality complementary coding system, wherein the new

9 compressed moving picture data corresponds to the chosen
10 portion of the display image for displaying the chosen portion
11 on the mobile device in a larger fashion.

1 **Claim 17 (currently amended):** A system comprising:
2 a mobile terminal including telephone capability for
3 connecting to a telephone network and capable of
4 displaying compressed moving picture data;
5 a service providing system for providing content data
6 representing a high quality still image coded using
7 a still picture coding format as a service; and
8 an information providing system for acquiring the content
9 data from the service providing system and for
10 providing a communication service to the mobile
11 terminal, said information providing system
12 including:

13 moving picture coding means for producing compressed
14 moving picture data coded using a moving
15 picture coding format by transforming from the
16 content data coded using the still picture
17 coding format into the moving picture coding
18 data coded using the moving picture coding
19 format, and for providing compressed moving
20 picture data to the mobile terminal for display
21 on the mobile terminal,

22 transmitting means for transmitting the compressed
23 moving picture data to the mobile terminal,
24 wherein the mobile terminal displays a still
25 display image representing the high quality
26 still image from the compressed moving picture
27 data using said moving picture coding format,
28 control means for determining an area of the still
29 picture data coded into the compressed moving

30 picture data in response to a user selection of
31 a portion of the still display image from the
32 user terminal, and for notifying the selected
33 area to the moving picture coding means,
34 wherein
35 the moving picture coding means then produces new
36 compressed moving picture data from the content
37 data corresponding to the user selected portion
38 of the display image for displaying the
39 selected portion on the mobile terminal in a
40 larger fashion as a zoomed still image; wherein
41 the information providing system operates such that
42 a primary portion of image processing of the
43 content data is conducted at the information
44 providing system to thereby reduce a processing
45 load and/or a memory requirement on the mobile
46 terminal.